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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,871

07/21/2006

Armin Merz

R.307341

1552

2119

7590

10/27/2009

RONALD E. GREIGG

GREIGG & GREIGG P.L.L.C.

1423 POWHATAN STREET, UNIT ONE

ALEXANDRIA, VA 22314

EXAMINER

COLEMAN, KEITH A

ART UNIT

PAPER NUMBER

3747

MAIL DATE

DELIVERY MODE

10/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,871	Applicant(s) MERZ ET AL.	
	Examiner KEITH COLEMAN	Art Unit 3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,12,14,17,21 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,12,14,17,21, and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages, filed 7/6/2009, with respect to limitations dealing with the "non-rotatable portions" and "the receptacle contained in the same housing part" have been fully considered and are persuasive. The 102 rejections of the previously cited references have been withdrawn.
2. As such, the amendments submitted on 4/6/2009 have been entered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 10, 12, 14, 17, 21, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Beeh (US Patent No. 2,351,908).

With regards to claim 10, the patent to Beeh discloses a high pressure pump (i.e. high pressure pump mentioned on Col. 1, Lines 1-5) for a fuel injection system of an internal combustion engine (See Col. 1, Lines 1-5), the pump comprising a housing (i.e. interior of 218, See Col. 6, Lines 40-45) with at least one pump element (i.e. plunger 121, See Col. 6, Lines 28-32) including a piston (121) driven into a stroke motion by a drive shaft (i.e. cam shaft 122); the piston (121) being guided so that it can slide in a

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cylinder bore (i.e. the interior of 218 is a bore shown in Figure 10) of a housing part and delimiting a pumping chamber (i.e. interior of 218 delimits a pump chamber) therein; a support element (i.e. 130) supporting the pump piston (121) against the drive shaft (122); a pre-stressed return spring (i.e. 310) acting on both the pump piston (121) and the support element (219) in the direction toward the drive shaft (122), a receptacle (131) contained in the same housing part that contains the cylinder bore (i.e. interior of 218), the support element (130) being guided so that it can slide in the receptacle (131) in the direction of the longitudinal axis of the pump piston (121), but cannot rotate around the longitudinal axis (i.e. 130 cannot rotate along the longitudinal axis as shown in Figure 10). wherein an end of the cylinder bore oriented toward the drive shaft (122) terminates at a plane containing a wall of the receptacle (See Figure 16).

With regards to claim 12, the patent to Beeh discloses wherein the receptacle (131) is embodied in the form of at least one slot provided in the housing part (See Figure 16).

With regards to claim 14, the patent to Beeh discloses wherein the support element (130) is embodied as at least approximately rectangular in cross section (See Figure 16).

With regards to claim 17, the patent to Beeh discloses wherein the housing part comprises an extension (i.e. barrel 115) that is at least approximately cylindrical, is

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oriented toward the drive shaft (122), and contains the cylinder bore and the receptacle (See Figure 16).

With regards to claim 21, the patent to Beeh discloses wherein the return spring (i.e. spring 303) is a helical compression spring encompassing the extension (i.e. barrel 115) of the housing part (See Figure 16).

With regards to claim 28, the patent to Beeh discloses wherein the return spring (303) is supported at least indirectly against the support element (via plunger 121); and wherein the pump piston (121) is coupled to the support element (130) in the direction of its longitudinal axis (See Figure 16).

Response to Arguments

5. Applicant's arguments with respect to claims 10, 12, 14, 17, 21, and 28 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's Arguments

Applicant contends that the Kovacs et al. reference does not explicitly disclose a receptacle in the same housing part in addition to the support element being non-rotatable in the longitudinal axis.

Examiner's Response to Arguments

Applicant's arguments were persuasive and the previous 102 rejection has been withdrawn. However, upon a further search, the patent to Beeh clearly shows Applicant's claimed subject matter. Particularly, the receptacle is shown in Figures 10 and 16. Furthermore, the support element 130 does not rotate along the longitudinal axis since this element is supported on a ball bearing 219. As such, the newly submitted claims were rejected accordingly.

June 20, 1944.

L. BEEH

2,351,908

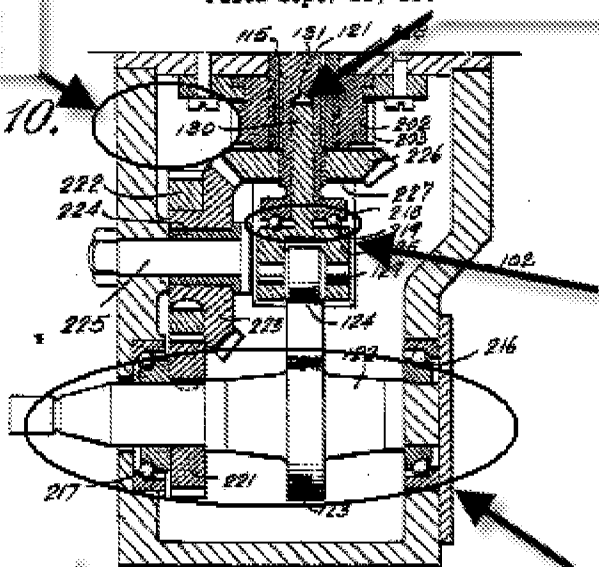
HIGH-PRESSURE PUMP

Filed Sept. 18, 194

Receptacle

Support
Element

Fig. 10.



Ball Bearing

Spring

Camshaft

Fig. 11.

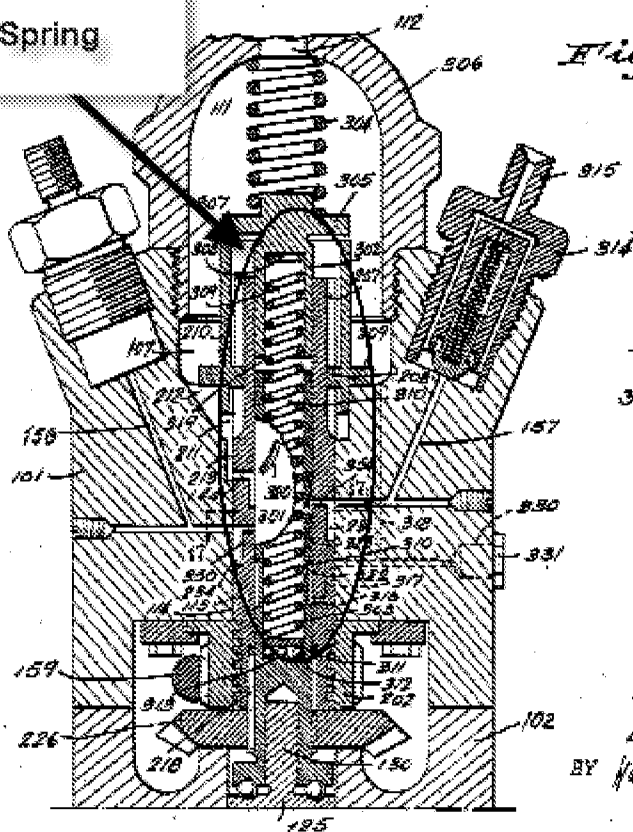
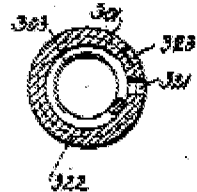


Fig. 17.



INVENTOR.
LOUIS BEEH
BY Walter S. Tolson

ATTORNEY

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As such, prosecution has been reopened.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Porel (US Patent No. 6,264,437) shows the current state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEITH COLEMAN whose telephone number is (571)270-3516. The examiner can normally be reached on 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Cronin can be reached on (571)272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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KAC

/K. C./

Examiner, Art Unit 3747

/Stephen K. Cronin/

Supervisory Patent Examiner, Art Unit 3747